REMARKS

Claims 1-16 are pending in the application. Claim 1 is amended. No new matter is presented. The above amendments and the following remarks are considered by Applicants to overcome each rejection raised by the Examiner and to place the application in condition for allowance. An early Notice of Allowance is therefore requested.

Applicants acknowledge the Examiner for the interview discussing the present application. In view of the interview, Applicants have amended claim 1 to more clearly recite the features of the claimed invention. Thus, in view of the above amendments and the following remarks, Applicants request the favorable consideration of claims 1-16.

Claims 1, 2, and 6 were rejected under 35 U.S.C. 102(b) as being anticipated by Vincent (U.S. Patent No. 5,272,518). The Examiner takes the position that Vincent discloses all the features recited in claims 1, 2, and 6. Applicants respectfully disagree.

Vincent is directed to an apparatus for monitoring, converting, and calibrating the spectra displayed by a colored object, using wavelength dispersion provided by a variable wavelength filter. More specifically, Vincent discloses an apparatus that provides a variable wavelength light filter which disperses the beam into a plurality of wavelengths that increase monotonically with position x or a selected direction in the light-receiving surface. Thus, the light filter either reflects the dispersed light beam or transmits the dispersed light beam through the filter. As a result, for any position x, the light filter is confined to a very narrow wavelength pass band with no side bands being transmitted at that position x. (See Column 6, Lines 25-40).

Claim 1 is amended to recite the feature of each interference filter having different overlapping spectral sensitivity functions. As discussed in the Interview, it is respectfully submitted that Vincent neither teach nor suggest that the each filter has different overlapping spectral sensitivity functions.

In view of this distinction, it is respectfully submitted that Vincent fails to teach or suggest each interference filter having a different overlapping transmission function over wavelength of the light to be measure spectrally being adapted to the response to the human eye

in such a way that the product of the base sensitivity curve of the photosensor and the transmission function of the interference filter is proportional to the normal spectral sensitivity curve of the human eye for one of the relevant coordinates of the color space, so that the passed spectral components generate measurement values in the three partial surfaces, which measurement values can be converted into spectral color values with simple scaling related to one another. Although Vincent discloses multilayer systems as spectral filters, Vincent does not teach or suggest each interference filter having a different overlapping transmission function as recited in claim 1. Therefore, Applicants respectfully submit that Vincent fails to teach or suggest all the features recited in claim 1. Accordingly, Applicants request the withdrawal of the rejection of claim 1 under 35 U.S.C. 102(b).

Claims 2 and 6 are dependent upon claim 1. It is submitted that claims 2 and 6 recite patentable subject matter for at least the reasons mentioned above. Therefore, since Vincent fails to teach or suggest the features discussed above, Applicants request the withdrawal of the rejection of claim 2 under 35 U.S.C. 102(b).

Claims 3-5 were rejected under 35 U.S.C. 103(a) as being unpatentable over Vincent in view of Delignieres (U.S. Patent No. 5,680,220). The Examiner takes the position that the combination of Vincent and Delignieres teaches or suggests all the features recited in claims 3-5. Applicants respectfully disagree.

Delignieres discloses a linear correction method, however, Delignieres fails to cure the deficiencies of Vincent. Since claims 3-5 are dependent upon claim 1, it is submitted that for at least the reasons mentioned above, claims 3-5 recite patentable subject matter. Accordingly, Applicants requests the withdrawal of the rejection of claims 2-7 under 35 U.S.C. 103(a).

Claims 7-9, 12, 13, and 15 were rejected under 35 U.S.C. 103(a) as being unpatentable over Vincent. Applicants respectfully traverse the rejection of claims 7-9, 12, 13, and 15.

Claims 7-9, 12, 13, and 15 are dependent upon claim 1. Therefore, it is submitted that for at least the reasons mentioned above, claims 7-9, 12, 13, and 15 recite patentable subject matter. Also Accordingly, Applicants requests the withdrawal of the rejection of claims 7-9, 12, 13, and 15 under 35 U.S.C. 103(a).

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vincent in view of Auth (U.S. Patent Re. 32,821). Applicants respectfully submit that the combination of Vincent and Auth fail to teach or suggest all the features recited in claim 10.

Auth is directed to an apparatus and method for photoluminescence analysis. Auth also discloses the use of a germanium photo-diode.

Although Auth discloses a germanium photo-diode, Auth fails to cure the deficiencies of Vincent as discussed above. Claim 10 is dependent upon claim 1. Therefore, it is submitted that for at least the reasons mentioned above, claim 10 recites patentable subject matter. Accordingly, Applicants requests the withdrawal of the rejection of claim 10 under 35 U.S.C. 103(a).

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vincent in view of Turner (U.S. Patent No. 6,707,556). The Examiner takes the position that the combination of Vincent and Turner teach or suggest all the features recited in claim 11. Applicants respectfully disagree.

Claim 11 is dependent upon claim 1. Although Tuner discloses InGaAs diodes, Turner does not cure the deficiencies of Vincent. Therefore, it is submitted that for at least the reasons mentioned above, claim 11 recites patentable subject matter. Accordingly, Applicants requests the withdrawal of the rejection of claim 11 under 35 U.S.C. 103(a).

Claims 1-3, and 6 were rejected under 35 U.S.C. 103(a) as being unpatentable over Jie (U.S. Patent No. 6,133,954) in view of Hanrahan (U.S. Patent No. 5,246,803). The Examiner takes the position that the combination of Jie and Hanrahan teach or suggest all the features recited in claims 1-3, and 6. Applicants respectfully disagree.

Jie is directed to a single integrated-circuit color camera chip that includes color sensitive triplets of light detecting cells for different colors. However, the triplets are not arranged in a position directly adjacent but aligned in rows and lines of the integrated-circuit chip with gaps in between. Although Jie discloses a rhombus-shaped sensor elements arranged in a honeycomb configuration of red, green and blue sensitivity. This configuration is chosen to form a color image sensor and not for true color measurement. In other words, Jie is not adapted to measure the sensitivity of the human eye. (See Column 2, Lines 61-65, Column 3, Lines 61-65), and Column 4, Lines 5-12). Jie merely discloses the filter means as being band pass filters that are associated with the Red, Green, Blue colors. Thus Jie does not teach or suggest using the color filters in coordinates of a defined color space and there is not teaching for adapting the sensitivity

functions of the human eye. Also, Jie fails to teach or suggest that the R-G-B filters are interference filters such as the filters of the claimed invention.

Hanrahan discloses the use of silicon oxide and titanium oxide, however, it is submitted that Hanrahan does not cure the deficiency of Jie. In particular, the combination of Jie and Hanrahan fail to teach or suggest each interference filter having a different overlapping transmission functions over wavelength of the light to be measure spectrally being adapted to the response to the human eye in such a way that the product of the base sensitivity curve of the photosensor and the transmission function of the interference filter is proportional to the normal spectral sensitivity curve of the human eye for one of the relevant coordinates of the color space, so that the passed spectral components generate measurement values in the three partial surfaces, which measurement values can be converted into spectral color values with simple scaling related to one another.

In view of the above cited distinctions, Applicants request the withdrawal of the rejection of claims 1 under 35 U.S.C. 103(a).

Claim 2, 3, and 6 are dependent upon claim 1. It is submitted that claims 2, 3, and 6 recite patentable subject matter for at least the reasons mention above. Therefore, Applicants request the withdrawal of the rejection of claims 2, 3, and 6 under 35 U.S.C. 103(a).

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jie in view of Hanrahan and further in view of Delignieres. Applicants respectfully traverse the rejection of claim 3.

Claim 3 is dependent upon claim 1. It is respectfully submitted that neither Hanrahan nor Delignieres either in combination or alone cure the deficiencies of Jie. As a result, it is submitted that claim 3 recites patentable subject matter for at least the reasons mentioned above. Therefore, Applicants request the withdrawal of the rejection of claim 3 under 35 U.S.C. 103(a).

Claims 7-9 and 12 were rejected under 35 U.S.C. 103(a) as being unpatentable Jie in view of Hanrahan. Applicants traverse the rejection of claims 7-9 and 12.

Claims 7-9 and 12 are dependent upon claim 1. Therefore, it is submitted that for at least the reasons mentioned above, claims 7-9, and 12 recite patentable subject matter. Accordingly, Applicants requests the withdrawal of the rejection of claims 7-9 and 12 under 35 U.S.C. 103(a).

Claims 13, 15, and 16 were rejected under 35 U.S.C. 103(a) as being unpatentable over Jie in view of Hanrahan in view of Mathies (U.S. Patent No. 6,867,420). Applicants traverse the rejection of claims 13, 15, and 16.

Claims 13, 15, and 16 are dependent upon claim 1. Therefore, it is submitted that for at least the reasons mentioned above, claims 13, 15, and 16 recite patentable subject matter. Accordingly, Applicants requests the withdrawal of the rejection of claims 13, 15, and 16 under 35 U.S.C. 103(a).

Claim 10 was rejected under 35 U.S.C. 103(a) as being unpatentable over Jie in view of Hanrahan in view of Auth. Applicants respectfully traverse the rejection of claims 10.

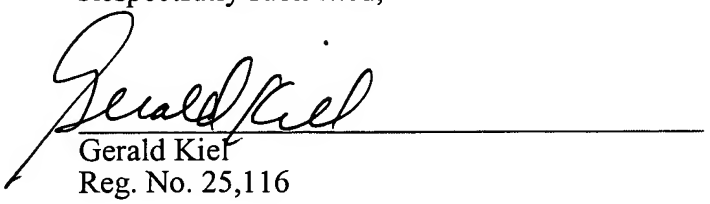
Claim 10 is dependent upon claim 1. Since Auth fails to cure the deficiencies of Jie and Hanrahan, it is submitted that for at least the reasons mentioned above, claim 10 recites patentable subject matter. Accordingly, Applicants requests the withdrawal of the rejection of claim 10 under 35 U.S.C. 103(a).

Claim 11 was rejected under 35 U.S.C. 103(a) as being unpatentable over Jie in view of Hanrahan in view of Turner. Applicants respectfully traverse the rejection of claims 11.

Claim 11 is dependent upon claim 1. It is submitted that since Turner fails to cure the deficiencies of Jie and Hanrahan claim 11 recites patentable subject matter, for at least the reasons mentioned above. Accordingly, Applicants requests the withdrawal of the rejection of claim 10 under 35 U.S.C. 103(a).

In view of the above amendments and remarks, Applicants submit claims 1-16 recite subject matter that is neither taught nor suggested by the applied references. Thus, for the reasons presented above, claims 1-16 are believed by Applicants to define patentable subject matter and should be passed to issue at the earliest possible time. A Notice of Allowance is requested.

Respectfully submitted,



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